

I. THE OBJECTION TO THE CLAIM FOR PRIORITY

On page 2 of the Office Action, Applicant was alleged to not have complied with one or more conditions for receiving the benefit of an earlier filing data under 35 U.S.C. 119(e).

Applicant has amended the specification as suggested by the Examiner.

In view of the foregoing, it is respectfully requested that the aforementioned objection to claim for priority be withdrawn.

II. THE OBJECTION TO CLAIMS 15, 21, 138, 196 AND 197

On pages 3 and 4 of the Office Action, claims 15, 21, 138, 196 and 197 were objected to as containing minor informalities, or as being of improper dependent form. These rejections are hereby traversed.

Applicant has amended claims 15, 21 and 138 as suggested by the Examiner. Applicant traverses the objection to claims 196 and 197 as being of improper dependent form. In particular, Applicant respectfully submits that claims 196 and 197 further recite, respectively, that the frequency is determined from a model that calculates an optimum frequency from parameters of the fluid stream, or determined from an observance of an effect of several frequencies on the fluid stream. Accordingly, Applicant respectfully submits that claims 196 and 197 further narrow the scope of independent claim 190.

On page 2 of the Office Action, Applicant was alleged to not have complied with one or more conditions for receiving the benefit of an earlier filing data under 35 U.S.C. 119(e).

Applicant has amended the specification as suggested by the Examiner.

In view of the foregoing, it is respectfully requested that the aforementioned objection to claim for priority be withdrawn.

II. THE OBJECTION TO CLAIMS 15, 21, 138, 196 AND 197

On pages 3 and 4 of the Office Action, claims 15, 21, 138, 196 and 197 were objected to as containing minor informalities, or as being of improper dependent form. These rejections are hereby traversed.

Applicant has amended claims 15, 21 and 138 as suggested by the Examiner. Applicant traverses the objection to claims 196 and 197 as being of improper dependent form. In particular, Applicant respectfully submits that claims 196 and 197 further recite, respectively, that the frequency is determined from a model that calculates an optimum frequency from parameters of the fluid stream, or determined from an observance of an effect of several frequencies on the fluid stream. Accordingly, Applicant respectfully submits that claims 196 and 197 further narrow the scope of independent claim 190.

In view of the foregoing, it is respectfully requested that the aforementioned objection to claims 15, 21, 138, 196 and 197 be withdrawn.

III. THE ANTICIPATION REJECTION OF CLAIMS 1-11, 15, 17-19, 20-22, 24-26, 29-36, 42-44, 49-58, 62-69, 72-75, 77, 78, 81, 82-85, 90, 97, 102-105, 107-109, 117, 119, 124-133, 138-149, 154-180, 184-190, 192, 194, 195 AND 197

On page 4 of the Office Action, claims 1-11, 15, 17-19, 20-22, 24-26, 29-36, 42-44, 49-58, 62-69, 72-75, 77, 78, 81, 82-85, 90, 97, 102-105, 107-109, 117, 119, 124-133, 138-149, 154-180, 184-190, 192, 194, 195 and 197 were rejected under 35 U.S.C. § 102(b) as being anticipated by Goforth (U.S. Patent No. 5,419,877), or Eng (U.S. Patent No. 3,643,623). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987).

That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id..

Although Applicant does not agree with the pending rejections, Applicant has nonetheless amended the claims to clarify the claimed systems and methods and better distinguish the cited references. Each of independent claims 1, 49, 82, 102, 108, 124, 127, 154, 177 and 190 has been amended to recite that the acoustic fields of the various systems and methods have a frequency of sound **determined** to increase acoustical stimulation. Applicant respectfully submits that none of the cited references teach or suggest any feature or functionality for determining a frequency of sound to increase acoustical stimulation, and thus do not teach or suggest, alone or in combination, a frequency of sound determined to increase acoustical stimulation.

Accordingly, Applicant respectfully submits that independent claims 1, 49, 82, 102, 108, 124, 127, 154, 177 and 190, as amended, are allowable over the cited references.

Claims 2-48, 50-81, 83-101, 103-107, 109-120, 125-126, 128-153, 155-176, and 178-189 are dependent upon independent claim 1, 49, 82, 102, 108, 124, 127, 154, 177 or 190. Thus, since independent claim 1, 49, 82, 102, 108, 124, 127, 154, 177 or 190 should be allowable as discussed above, claims 2-48, 50-81, 83-101, 103-107, 109-120, 125-126, 128-153, 155-176, and 178-189 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination. For example, claim 2 recites wherein the acoustic generator of claim 1 is further defined as an array of sound sources mounted along the duct to produce a plurality of acoustic fields in the fluid passageway of the duct. Applicant respectfully submits that none of the cited references - alone or in combination - teach or suggest the apparatus of claim 1 wherein the acoustic generator is further defined as an array of sound sources mounted along the duct to produce a plurality of acoustic fields in the fluid passageway of the duct.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1-11, 15, 17-19, 20-22, 24-26, 29-36, 42-44, 49-58, 62-69, 72-75, 77, 78, 81, 82-85, 90, 97, 102-105, 107-109, 117, 119, 124-133, 138-149, 154-180, 184-190, 192, 194, 195 and 197 be withdrawn.

IV. THE OBVIOUSNESS REJECTION OF CLAIMS 3, 6, 12-14, 19, 23, 27-28, 37-48, 52, 58-61, 70-71, 76, 80, 86-89, 91-96, 98-101, 106, 110-116, 118, 120, 134-137, 150-176, 191, 193 AND 196

On pages 14-21 of the Office Action, claims 3, 6, 12-14, 19, 23, 27-28, 37-48, 52, 58-61, 70-71, 76, 80, 86-89, 91-96, 98-101, 106, 110-116, 118, 120, 134-137, 150-176, 191, 193 and 196 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Eng; Goforth; Goforth in view of Vicard (U.S. Patent No. 6,171,366); Goforth in view of Wojtowicz (U.S. Patent No. 6,322,613); Eng in view of Vicard; Goforth in view of Chang (U.S. Patent No. 6,451,094); or Eng in view of Chang. These rejections are hereby respectfully traversed.

As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both

be found in the prior art, not in applicant's disclosure. In re
Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that the obviousness
rejections of claims 3, 6, 12-14, 19, 23, 27-28, 37-48, 52, 58-
61, 70-71, 76, 80, 86-89, 91-96, 98-101, 106, 110-116, 118, 120,
134-137, 150-176, 191, 193 and 196 have been overcome by the
amendments and remarks set forth in connection with the
anticipation rejection of claims 1-11, 15, 17-19, 20-22, 24-26,
29-36, 42-44, 49-58, 62-69, 72-75, 77, 78, 81, 82-85, 90, 97,
102-105, 107-109, 117, 119, 124-133, 138-149, 154-180, 184-190,
192, 194, 195 and 197.

In view of the foregoing, it is respectfully requested that
the aforementioned obviousness rejection of claims 3, 6, 12-14,
19, 23, 27-28, 37-48, 52, 58-61, 70-71, 76, 80, 86-89, 91-96,
98-101, 106, 110-116, 118, 120, 134-137, 150-176, 191, 193 and
196 be withdrawn.

V. THE DOUBLE PATENTING OF THE "SAME INVENTION" REJECTION OF
CLAIMS 5, 19, 31 AND 36

On page 22 of the Office Action, claims 5 and 31 and 19 and
36 are alleged to be substantial duplicates.

Applicant has canceled claims 31 and 36.

In view of the foregoing, it is respectfully requested that the aforementioned double patenting rejection of claims 5, 31, 19 and 36 be withdrawn.

VI. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Patent Application
Attorney Docket No.: 66007.000008

Respectfully submitted,

Hunton & Williams LLP

By:



Ozzie A. Farres

Registration No. 43,606

Hunton & Williams LLP
1900 K Street, N.W.
Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

Date: November 25, 2005